

Correcting Misinformation About Climate Change: The Impact of Partisanship in an Experimental Setting

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This file contains full wording of the treatments and survey questions from the above study. Please contact the corresponding author at salilbenegal at depauw.edu for any questions or comments on this study.

Treatments:

Misinformation article (shown to all treatment groups)

Senator James Inhofe (R-OK), Chairman of the Senate Environment Committee, stated in an interview last month that environmental regulations aimed at addressing climate change were "alarmist" and that the science over climate change remains unsettled.

"It's important to question whether climate change is even a problem for human existence," Inhofe said. "Thus far no one has seriously demonstrated any scientific proof that increased global temperatures would lead to the catastrophes predicted by alarmists. The claim that global warming is caused by man-made emissions is simply untrue and not based on sound science."

Inhofe has made similar comments in the past, most notably during a Senate speech in 2015 when he argued that the earth is currently in a cooling period. Inhofe has been a strong critic of recent federal bills aiming to cut carbon pollution by regulating power plant emissions and oil drilling. The regulations pose a serious threat to the country's economy, he said.

Treatment 1: Misinformation article with no correction.

Treatment 2: Misinformation article with the following (Democrat source) conclusion:

However, several Democrats have been critical of Inhofe's remarks on climate change. Senators Brian Schatz (D-HI) and Maria Cantwell (D-WA) pointed to recent reports from the Intergovernmental Panel on Climate Change (IPCC) that recently declared that human activities have caused most of earth's temperature rise since 1950 and will continue to do so in the future. The IPCC, which is a non-partisan panel of scientists from over 100 countries, estimates that global temperatures may increase by as much as 4.8°C over pre-industrial levels by 2100. Democrat Senator Sheldon Whitehouse (D-RI) said, "When you have over 90 percent of the world's scientists who have studied this stating that climate change is occurring and that humans play a contributing role, it's time to defer to the experts."

Treatment 3: Misinformation article with the following (scientist source) conclusion:

However, several scientists have been critical of Inhofe's remarks on climate change. Members of NASA pointed to recent reports from the Intergovernmental Panel on Climate Change (IPCC) that recently declared that human activities have caused most of earth's temperature rise since 1950 and will continue to do so in the future. The IPCC, which is a non-partisan panel of scientists from over 100 countries, estimates that global temperatures may increase by as much as 4.8°C over pre-industrial levels by 2100. Dr. James Hansen, a climatologist who worked at NASA for over 40 years said, "When you have over 90 percent of the world's scientists who have studied this stating that climate change is occurring and that humans play a contributing role, it's time to defer to the experts."

Treatment 4: Misinformation article with the following (Republican source) conclusion:

However, several Republicans have recently been critical of Inhofe's remarks on climate change. Senators John Thune (R-SD) and Kelly Ayotte (R-NH) pointed to recent reports from the Intergovernmental Panel on Climate Change (IPCC) that recently declared that human activities have caused most of earth's temperature rise since 1950 and will continue to do so in the future. The IPCC, which is a non-partisan panel of scientists from over 100 countries, estimates that global temperatures may increase by as much as 4.8°C over pre-industrial levels by 2100. Republican Congressman Chris Smith (R-NJ) said, "When you have over 90 percent of the world's scientists who have studied this stating that climate change is occurring and that humans play a contributing role, it's time to defer to the experts."

Survey questions

Post-treatment opinion questions on climate change (names in parentheses indicate variable names in replication data.dta)

Now, please state your level of agreement with the following statements on a scale of 1-10, 10 indicating the strongest level of agreement.

Scientific consensus on climate change (Sciconsensus)

There is a general consensus among scientists that the average temperature on earth has been getting warmer over the past few decades.

- 1 (Strongly disagree) (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- 9 (9)
- 10 (Strongly agree) (10)

Climate change mostly anthropogenic (CChumans)

The problem of climate change is mainly due to human activity such as burning fossil fuels.

- 1 (Strongly disagree) (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- 9 (9)
- 10 (Strongly agree) (10)

Climate change an important problem (CCserious)

How important a problem do you think climate change is at this moment, on a scale of 1-10?

- 1 (Not important at all) (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- 9 (9)
- 10 (Very important) (10)

Which of the following statements best summarizes the article that you just read? (attention)

- 1___ Senator James Inhofe is skeptical about climate change
- 2___ Senator James Inhofe believes that climate change is an urgent problem
- 3___ Senator James Inhofe is optimistic about the 2016 election
- 4___ Senator James Inhofe wants bipartisan policy on climate change

Pre-treatment demographic questions (names in parentheses indicate variable names in replication data.dta)

Age (age)

What is your age?

Sex (sex)

What is your sex?

Male (1)

Female (2)

Race/ethnicity (racethn)

Which best describes your ethnicity?

White or Caucasian (1)

Hispanic or Latino (2)

Black or African-American (3)

Native-American (4)

Asian or South Asian (5)

Other (6)

Education (educ)

What is the highest degree or level of school you have completed? If currently enrolled, highest degree received.

Less than high school (up to 8th grade) (1)

Some high school, no diploma (2)

High school graduate, diploma or the equivalent (for example: GED) (3)

Some college credit, no degree (4)

Two year associate degree (5)

Four year college or university/Bachelor's degree (e.g. BS, BA) (6)

Postgraduate or professional graduate degree (e.g. MA, MS, PhD, JD, MD) (7)

Party ID (pid)

In politics today, do you consider yourself a Democrat or Republican?

Republican (1)

Democrat (2)

Independent (3)

No preference (4)

Other party (5)

Party leaning (partyln)

[Display This Question:

If In politics today, do you consider yourself a Democrat or Republican? = Independent

Or In politics today, do you consider yourself a Democrat or Republican? = No preference

Or In politics today, do you consider yourself a Democrat or Republican? = Other party]

As of today, do you lean more towards the Republican or Democratic party?

- Republican (1)
- Democrat (2)
- No preference (3)

Partisan association strength – Dem (demstrength)

[Display This Question:

If In politics today, do you consider yourself a Democrat or Republican? = Democrat]

Do you consider yourself to be a strong Democrat, or a moderate (not strong) Democrat?

- Strong (1)
- Moderate (2)

Partisan association strength – Rep (repstrength)

[Display This Question:

If In politics today, do you consider yourself a Democrat or Republican? = Republican]

Do you consider yourself to be a strong Republican, or a moderate (not strong) Republican?]

- Strong (1)
- Moderate (2)

Ideology (ideology)

How would you describe your general political views?

- Very conservative (1)
- Conservative (2)
- Moderate (3)
- Liberal (4)
- Very liberal (5)

Employment (employ)

Which best describes your employment status?

- Employed for wages (1)
- Unemployed and looking for work (2)
- Unemployed and not looking for work (3)
- Homemaker (4)
- Student (5)
- Retired (6)

News attention (newsattn)

Approximately how much time did you spend following the news yesterday (whether by TV, newspapers, online, or social media)?

- No time at all (1)
- Less than 15 minutes (2)
- 15-29 minutes (3)
- 30-59 minutes (4)
- More than one hour (5)

Religion (religion)

What is your present religion, if any?

Protestant (Baptist, Methodist, Non-denominational, Lutheran, Presbyterian, Pentecostal, Episcopalian, Reformed, Church of Christ, Jehovah's Witness, etc.) (1)
Roman Catholic (Catholic) (2)
Mormon (Church of Jesus Christ of Latter-day Saints/LDS) (3)
Orthodox (Greek, Russian, or some other orthodox church) (4)
Jewish (Judaism) (5)
Muslim (Islam) (6)
Buddhist (7)
Hindu (8)
Atheist (do not believe in God) (9)
Agnostic (not sure if there is a God) (10)
Other (11)